



FORM PTO-1449

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250INVENTORS  
SORRELLS *et al.*FILING DATE  
March 4, 2002ART UNIT  
2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
SB	AG55	5,682,099	10/1997	Thompson <i>et al.</i>			
	AH55	6,094,084	07/2000	Abou-Allam <i>et al.</i>			
SB	AI55	6,067,329	05/2000	Kato <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
SB	AL23	DE 196 48 915 A1	06/1998	DE			Yes (Doc. AO59)
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

SB	AN	59	Simoni, A. <i>et al.</i> , "A Single-Chip Optical Sensor with Analog Memory for Motion Detection," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. 30, No. 7, pp. 800-806 (July 1995).				
	AO	59	English Translation of German Patent Publication No. DE 196 48 915 A1, 10 pages.				
SB	AP	59	Deboo, Gordon J., <i>Integrated Circuits and Semiconductor Devices</i> , 2 <sup>nd</sup> Edition, McGraw-Hill, Inc., pp. 41-45 (1977).				
	AQ						
	AR						

EXAMINER

*Khatri*

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0140008APPLICATION NO.  
10/086,250INVENTORS  
SORRELLS *et al.*FILING DATE  
March 4, 2002ART UNIT  
2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA56	6,516,185	02/2003	MacNally			/
	AB56	6,608,647	08/2003	King			/
	AC56	6,687,493 B1	02/2004	Sorrells <i>et al.</i>			/
	AD56	6,694,128 B1	02/2004	Sorrells <i>et al.</i>			/
	AE56	6,031,217	02/2000	Aswell <i>et al.</i>			/
	AF56	5,955,992	09/1999	Shattil			/
	AG56	5,999,561	12/1999	Naden <i>et al.</i>			/
	AH56	6,686,879 B2	02/2004	Shattil			/
SB	AI56	6,704,549 B1	03/2004	Sorrells <i>et al.</i>			/

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

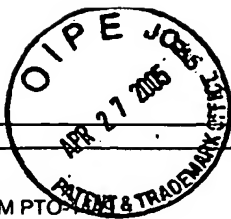
EXAMINER

Sshattil

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-101

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250INVENTORS  
SORRELLS *et al.*FILING DATE  
March 4, 2002ART UNIT  
2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA57	6,704,558 B1	03/2004	Sorrells <i>et al.</i>			
	AB57	5,490,176	02/1996	Peltier			
	AC57	5,970,053	10/1999	Schick <i>et al.</i>			
	AD57	6,078,630	06/2000	Prasanna			
	AE57	6,600,911 B1	07/2003	Morishige <i>et al.</i>			
	AF57	5,179,731	01/1993	Tränkle <i>et al.</i>			
	AG57	5,589,793	12/1996	Kassapian			
	AH57	4,510,467	04/1985	Chang <i>et al.</i>			
SB	AI57	4,772,853	09/1988	Hart			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

EXAMINER

*Skhacharya*

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250INVENTORS  
SORRELLS *et al.*FILING DATE  
March 4, 2002ART UNIT  
2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA58	4,972,436	11/1990	Halim <i>et al.</i>			/
	AB58	5,012,245	04/1991	Scott <i>et al.</i>			/
	AC58	5,422,909	06/1995	Love <i>et al.</i>			/
	AD58	5,440,311	08/1995	Gallagher <i>et al.</i>			/
	AE58	5,926,513	07/1999	Suominen <i>et al.</i>			/
	AF58	5,995,030	11/1999	Cabler			/
	AG58	6,047,026	04/2000	Chao <i>et al.</i>			/
	AH58	6,049,573	04/2000	Song			/
SB	AI58	6,076,015	06/2000	Hartley <i>et al.</i>			/

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

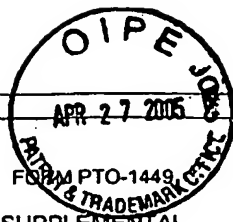
EXAMINER

S. Shattachay

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.


**SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT**

ATTY. DOCKET NO.  
1744.0140006

APPLICATION NO.  
10/086,250

INVENTORS  
SORRELLS *et al.*

FILING DATE  
March 4, 2002

ART UNIT  
2687

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA59	6,144,331	11/2000	Jiang			/
	AB59	6,018,553	01/2000	Sanielevici <i>et al.</i>			/
	AC59	6,317,589 B1	11/2001	Nash			/
	AD59	5,058,107	10/1991	Stone <i>et al.</i>			/
	AE59	5,757,858	05/1998	Black <i>et al.</i>			/
	AF59	6,531,979 B1	03/2003	Hynes			/
	AG59	6,018,262	01/2000	Noro <i>et al.</i>			/
	AH59	4,761,798	08/1988	Griswold, Jr. <i>et al.</i>			/
SB	AI59	5,982,315	11/1999	Bazarjani <i>et al.</i>			/

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

	AN		
	AO		
	AP		
	AQ		
	AR		

EXAMINER

S. Bhattacharya

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.0140006

APPLICATION NO.

10/086,250

INVENTORS

SORRELLS *et al.*

FILING DATE

March 4, 2002

ART UNIT

2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA60	6,459,721 B1	10/2002	Mochizuki <i>et al.</i>			✓
	AB60	6,151,354	11/2000	Abbey			✓
	AC60	6,169,733 B1	01/2001	Lee			✓
	AD60	6,363,262 B1	03/2002	McNicol			✓
	AE60	6,697,603 B1	02/2004	Lovinggood <i>et al.</i>			✓
	AF60	5,282,222	01/1994	Fattouche <i>et al.</i>			✓
	AG60	5,949,827	09/1999	DeLuca <i>et al.</i>			✓
	AH60	6,014,176	01/2000	Nayebi <i>et al.</i>			✓
SB	AI60	5,678,226	10/1997	Li <i>et al.</i>			✓

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

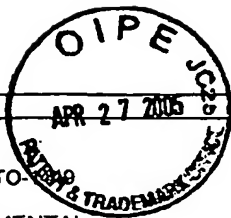
EXAMINER

S. Shallaachan

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.0140006

APPLICATION NO.

10/086,250

INVENTORS

SORRELLS *et al.*

FILING DATE

March 4, 2002

ART UNIT

2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA61	5,760,632	06/1998	Kawakami <i>et al.</i>			
	AB61	6,160,280	12/2000	Bonn <i>et al.</i>			
	AC61	5,481,570	01/1996	Winters			
	AD61	5,745,846	04/1998	Myer <i>et al.</i>			
	AE61	5,345,239	09/1994	Madni <i>et al.</i>			
	AF61	4,132,952	01/1979	Hongu <i>et al.</i>			
	AG61	5,260,973	11/1993	Watanabe			
	AH61	6,307,894 B2	10/2001	Eidson <i>et al.</i>			
SB	AI61	6,091,289	07/2000	Song <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

EXAMINER

Sghattachay

DATE CONSIDERED

C/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250INVENTORS  
SORRELLS *et al.*FILING DATE  
March 4, 2002ART UNIT  
2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
Sp	AA62	6,437,639 B1	08/2002	Nguyen <i>et al.</i>			/
	AB62	2002/0037706 A1	03/2002	Ichihara			/
	AC62	4,441,080	04/1984	Saari			/
	AD62	4,873,492	10/1989	Myer			/
	AE62	5,697,074	12/1997	Makikallio <i>et al.</i>			/
	AF62	5,784,689	07/1998	Kobayashi			/
	AG62	6,335,656 B1	01/2002	Goldfarb <i>et al.</i>			/
	AH62	6,690,232 B2	02/2004	Ueno <i>et al.</i>			/
Sp	AI62	5,636,140	06/1997	Lee <i>et al.</i>			/

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

EXAMINER

*Skattachon*

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-028

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.0140006

APPLICATION NO.

10/086,250

INVENTORS

SORRELLS *et al.*

FILING DATE

March 4, 2002

ART UNIT

2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
Sb	AA63	6,366,622 B1	04/2002	Brown <i>et al.</i>			/
	AB63	6,600,795 B1	07/2003	Ohta <i>et al.</i>			/
	AC63	4,250,458	02/1981	Richmond <i>et al.</i>			/
	AD63	5,760,629	06/1998	Urabe <i>et al.</i>			/
	AE63	6,084,465	07/2000	Dasgupta			/
	AF63	6,204,789 B1	03/2001	Nagata			/
	AG63	6,064,054	05/2000	Waczynski <i>et al.</i>			/
	AH63	5,218,562	06/1993	Basehore <i>et al.</i>			/
Sb	AI63	5,239,496	08/1993	Vancraeynest			/

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

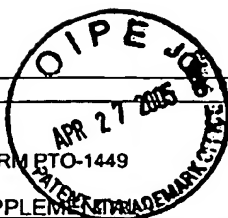
EXAMINER

Sizhaattachay

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

SUPPLEMENTARY  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250INVENTORS  
SORRELLS *et al.*FILING DATE  
March 4, 2002ART UNIT  
2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA64	5,896,304	04/1999	Tiemann <i>et al.</i>			
	AB64	6,005,903	12/1999	Mendelovicz			
	AC64	5,834,979	11/1998	Yatsuka			
	AD64	6,798,351 B1	09/2004	Sorrells <i>et al.</i>			
	AE64	6,813,485 B2	11/2004	Sorrells <i>et al.</i>			
	AF64	5,410,270	04/1995	Rybicki <i>et al.</i>			
	AG64	6,509,777 B2	01/2003	Razavi <i>et al.</i>			
	AH64	5,982,329	11/1999	Pittman <i>et al.</i>			
.56	AI64	3,614,630	10/1971	Rorden			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

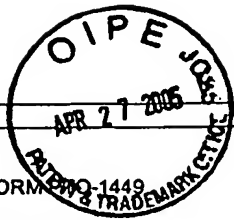
## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		

EXAMINER *Szchattachay*

DATE CONSIDERED 5/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.0140006

APPLICATION NO.

10/086,250

INVENTORS

SORRELLS *et al.*

FILING DATE

March 4, 2002

ART UNIT

2687

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA65	6,836,650 B2	12/2004	Sorrells <i>et al.</i>			/
	AB65	5,844,868	12/1998	Takahashi <i>et al.</i>			/
	AC65	6,385,439 B1	05/2002	Hellberg			/
	AD65	6,741,139 B2	05/2004	Pleasant <i>et al.</i>			/
	AE65	6,823,178 B2	11/2004	Pleasant <i>et al.</i>			/
	AF65	6,850,742 B2	02/2005	Fayyaz			/
SB	AG65	2002/0049038 A1	04/2002	Sorrells <i>et al.</i>			/
	AH						
	AI						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AN		
	AO		
	AP		
	AQ		
	AR		


EXAMINER

S. Shattachan

DATE CONSIDERED

6/8/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

		FORM PTO-1449		ATTY. DOCKET NO. 1744.0140006		APPLICATION NO. 10/086,250	
		INFORMATION DISCLOSURE STATEMENT		APPLICANTS Sorrells et al.		FILING DATE March 4, 2002	
				GROUP 2686			

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SJS	AA1	2,057,613	10/1936	Gardner	RECEIVED DEC 18 2003 Technology Center 2600		
	AB1	2,241,078	05/1941	Vreeland			
	AC1	2,270,385	01/1942	Skillman			
	AD1	2,283,575	05/1942	Roberts			
	AE1	2,358,152	09/1944	Earp			
	AF1	2,410,350	10/1946	Labin et al.			
	AG1	2,451,430	10/1948	Barone			
	AH1	2,462,069	02/1949	Chatterjea et al.			
	AI1	2,462,181	02/1949	Grosselfinger			

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
SJS	AJ1	DE 42 37 692 C1	03/1994	DE			No
	AK1	EP 0 035 166 A1	09/1981	EP			No
	AL1	EP 0 193 899 B1	06/1990	EP			N/A
	AM1	EP 0 380 351 A2	08/1990	EP			N/A


  

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
SJS	AN	1	Aghvami, H. et al., "Land Mobile Satellites Using the Highly Elliptic Orbits- The UK T-SAT Mobile Payload," <i>Fourth International Conference on Satellite Systems for Mobile Communications and Navigation</i> , IEE, pp. 147-153 (October 17-19, 1988).
	AO	1	Akers, N.P. et al., "RF Sampling Gates: a Brief Review," <i>IEE Proceedings</i> , IEE, Vol. 133, Part A, No. 1, pp. 45-49 (January 1986).
	AP	1	Al-Ahmad, H.A.M. et al., "Doppler Frequency Correction for a Non-Geostationary Communications Satellite. Techniques for CERS and T-SAT," <i>Electronics Division Colloquium on Low Noise Oscillators and Synthesizers</i> , IEE, pp. 4/1-4/5 (January 23, 1986).
	AQ	1	Ali, I. et al., "Doppler Characterization for LEO Satellites," <i>IEEE Transactions on Communications</i> , IEEE, Vol. 46, No. 3, pp. 309-313 (March 1998).
	AR	1	Allan, D.W., "Statistics of Atomic Frequency Standards," <i>Proceedings Of The IEEE Special Issue on Frequency Stability</i> , IEEE, pp. 221-230 (February 1966).

EXAMINER <i>Wray</i>	DATE CONSIDERED 12/10/04
-------------------------	-----------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

	FORM PTO-1449	ATTY. DOCKET NO. 1744.0140006	APPLICATION NO. 10/086,250
	INFORMATION DISCLOSURE STATEMENT	APPLICANTS Sorrells et al.	
		FILING DATE March 4, 2002	GROUP 2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>SB</i>	AA2	2,472,798	06/1949	Fredendall			
	AB2	2,497,859	02/1950	Boughtwood et al.			
	AC2	2,499,279	02/1950	Peterson			
	AD2	2,802,208	08/1957	Hobbs			
	AE2	2,985,875	05/1961	Grisdale et al.			
	AF2	3,023,309	02/1962	Foulkes			
	AG2	3,069,679	12/1962	Sweeney et al.			
	AH2	3,104,393	09/1963	Vogelman			
<i>SB</i>	AI2	3,114,108	12/1963	McManus			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>SB</i>	AJ2	EP 0 380 351 A3	02/1991	EP			N/A
	AK2	EP 0 411 840 A2	02/1991	EP			N/A
	AL2	EP 0 411 840 A3	07/1991	EP			N/A
<i>SB</i>	AM2	EP 0 411 840 B1	10/1995	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SB</i>	AN	2	Allstot, D.J. et al., "MOS Switched Capacitor Ladder Filters," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-13, No. 6, pp. 806-814 (December 1978).
	AO	2	Allstot, D.J. and Black Jr. W.C., "Technological Design Considerations for Monolithic MOS Switched-Capacitor Filtering Systems," <i>Proceedings of the IEEE</i> , IEEE, Vol. 71, No. 8, pp. 967-986 (August 1983).
	AP	2	Alouini, M. et al., "Channel Characterization and Modeling for Ka-Band Very Small Aperture Terminals," <i>Proceedings Of the IEEE</i> , IEEE, Vol. 85, No. 6, pp. 981-997 (June 1997).
	AQ	2	Andreyev, G.A. and Ogarev, S.A., "Phase Distortions of Keyed Millimeter-Wave Signals in the Case of Propagation in a Turbulent Atmosphere," <i>Telecommunications and Radio Engineering, Scripta Technica</i> , Vol. 43, No. 12, pp. 87-90 (December 1988).
<i>SB</i>	AR	2	Antonetti, A. et al., "Optoelectronic Sampling in the Picosecond Range," <i>Optics Communications</i> , North-Holland Publishing Company, Vol. 21, No. 2, pp. 211-214 (May 1977).

EXAMINER <i>Wheeler</i>	DATE CONSIDERED 12/10/04
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>SA</i>	AA3	3,118,117	01/1964	King et al.			
	AB3	3,226,643	12/1965	McNair			
	AC3	3,258,694	06/1966	Shepherd			
	AD3	3,383,598	05/1968	Sanders			
	AE3	3,384,822	05/1968	Miyagi			
	AF3	3,454,718	07/1969	Perreault			
	AG3	3,523,291	08/1970	Pierret			
	AH3	3,548,342	12/1970	Maxey			
<i>SA</i>	AI3	3,555,428	01/1971	Perreault			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>SA</i>	AJ3	EP 0 423 718 A2	04/1991	EP			N/A
	AK3	EP 0 423 718 A3	08/1992	EP			N/A
	AL3	EP 0 486 095 A1	05/1992	EP			N/A
<i>SA</i>	AM3	EP 0 486 095 B1	02/1997	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SA</i>	AN	3	Austin, J. et al., "Doppler Correction of the Telecommunication Payload Oscillators in the UK T-SAT," 18 <sup>th</sup> European Microwave Conference, Microwave Exhibitions and Publishers Ltd., pp. 851-857 (September 12 - 15, 1988).
	AO	3	Auston, D.H., "Picosecond optoelectronic switching and gating in silicon," <i>Applied Physics Letters</i> , American Institute of Physics, Vol. 26, No. 3, pp. 101-103 (February 1, 1975).
	AP	3	Baher, H., "Transfer Functions for Switched-Capacitor and Wave Digital Filters," <i>IEEE Transactions on Circuits and Systems</i> , IEEE Circuits and Systems Society, Vol. CAS-33, No. 11, pp. 1138-1142 (November 1986).
	AQ	3	Baines, R., "The DSP Bottleneck," <i>IEEE Communications Magazine</i> , IEEE Communications Society, pp. 46-54 (May 1995).
<i>SA</i>	AR	3	Banjo, O.P. and Vilar, E., "Binary Error Probabilities on Earth-Space Links Subject to Scintillation Fading," <i>Electronics Letters</i> , IEE, Vol. 21, No. 7, pp. 296-297 (March 28, 1985).

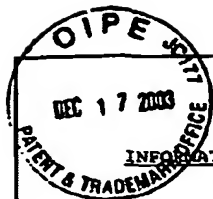
EXAMINER

*SA*

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
<i>SJB</i>	AA4	3,617,892	11/1971	Hawley et al.			
	AB4	3,621,402	11/1971	Gardner			
	AC4	3,623,160	11/1971	Giles et al.			
	AD4	3,626,417	12/1971	Gilbert			
	AE4	3,629,696	12/1971	Bartelink			
	AF4	3,662,268	05/1972	Gans et al.			
	AG4	3,689,841	09/1972	Bello et al.			
	AH4	3,714,577	01/1973	Hayes			
<i>SJB</i>	AI4	3,717,844	02/1973	Barret et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
<i>SJB</i>	AJ4	EP 0 512 748 A2	11/1992	EP			N/A
	AK4	EP 0 512 748 A3	07/1993	EP			N/A
	AL4	EP 0 512 748 B1	11/1998	EP			N/A
<i>SJB</i>	AM4	EP 0 548 542 A1	06/1993	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SJB</i>	AN	4	Banjo, O.P. and Vilar, E., "The Dependence of Slant Path Amplitude Scintillations on Various Meteorological Parameters," <i>Fifth International Conference on Antennas and Propagation (ICAP 87) Part 2: Propagation</i> , IEE, pp. 277-280 (March 30 - April 2, 1987).
	AO	4	Banjo, O.P. and Vilar, E., "Measurement and Modeling of Amplitude Scintillations on Low-Elevation Earth-Space Paths and Impact on Communication Systems," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. COM-34, No. 8, pp. 774-780 (August 1986).
	AP	4	Banjo, O.P. et al., "Tropospheric Amplitude Spectra Due to Absorption and Scattering in Earth-Space Paths," <i>Fourth International Conference on Antennas and Propagation (ICAP 85)</i> , IEE, pp. 77-82 (April 16-19, 1985).
	AQ	4	Basili, P. et al., "Case Study of Intense Scintillation Events on the OTS Path," <i>IEEE Transactions on Antennas and Propagation</i> , IEE, Vol. 38, No. 1, pp. 107-113 (January 1990).
<i>SJB</i>	AR	4	Basili, P. et al., "Observation of High C <sup>2</sup> and Turbulent Path Length on OTS Space-Earth Link," <i>Electronics Letters</i> , IEE, Vol. 24, No. 17, pp. 1114-1116 (August 18, 1988).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>FA</i>	AA5	3,735,048	05/1973	Tomsa et al.			
	AB5	3,806,811	04/1974	Thompson			
	AC5	3,868,601	02/1975	MacAfee			
	AD5	3,949,300	04/1976	Sadler			
	AE5	3,967,202	06/1976	Batz			
	AF5	3,980,945	09/1976	Bickford			
	AG5	3,987,280	10/1976	Bauer			
	AH5	3,991,277	11/1976	Hirata			
<i>SA</i>	AI5	4,003,002	01/1977	Snijders et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>FA</i>	AJ5	EP 0 632 288 A2	01/1995	EP			N/A
	AK5	EP 0 632 288 A3	07/1996	EP			N/A
	AL5	EP 0 696 854 A1	02/1996	EP			N/A
<i>SA</i>	AM5	EP 0 782 275 A2	07/1997	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>FA</i>	AN	5	Blakey, J.R. et al., "Measurement of Atmospheric Millimetre-Wave Phase Scintillations in an Absorption Region," <i>Electronics Letters</i> , IEE, Vol. 21, No. 11, pp. 486-487 (May 23, 1985).
	AO	5	Burgueño, A. et al., "Influence of rain gauge integration time on the rain rate statistics used in microwave communications," <i>Annales des télécommunications</i> , International Union of Radio Science, pp. 522-527 (September/October 1988).
	AP	5	Burgueño, A. et al., "Long-Term Joint Statistical Analysis of Duration and Intensity of Rainfall Rate with Application to Microwave Communications," <i>Fifth International Conference on Antennas and Propagation (ICAP 87) Part 2: Propagation</i> , IEE, pp. 198-201 (March 30 - April 2, 1987).
	AQ	5	Burgueño, A. et al., "Long Term Statistics of Precipitation Rate Return Periods in the Context of Microwave Communications," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 297-301 (April 4-7, 1989).
<i>SA</i>	AR	5	Burgueño, A. et al., "Spectral Analysis of 49 Years of Rainfall Rate and Relation to Fade Dynamics," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 38, No. 9, pp. 1359-1366 (September 1990).

EXAMINER

*Whately*

DATE CONSIDERED 12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>SP</i>	AA7	4,142,155	02/1979	Adachi			
	AB7	4,170,764	10/1979	Salz et al.			
	AC7	4,204,171	05/1980	Sutphin, Jr.			
	AD7	4,210,872	07/1980	Gregorian			
	AE7	4,245,355	01/1981	Pascoe et al.			
	AF7	4,253,066	02/1981	Fisher et al.			
	AG7	4,253,069	02/1981	Nossek			
	AH7	4,308,614	12/1981	Fisher et al.			
<i>SP</i>	AI7	4,320,361	03/1982	Kikkert			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>SP</i>	AJ7	EP 0 874 499 A2	10/1998	EP			N/A
	AK7	FR 2 743 231 A1	07/1997	FR			No
	AL7	GB 2 161 344 A	01/1986	GB			N/A
<i>SP</i>	AM7	GB 2 215 945 A	09/1989	GB			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SP</i>	AN	I	Copy of Declaration of Richard C. Looke filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 2 pages.
	AO	I	Copy of Declaration of Charley D. Moses, Jr. filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 2 pages.
	AP	I	Copy of Declaration of Jeffrey L. Parker and David F. Sorrells, with attachment Exhibit 1, filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 130 pages.
	AQ	I	Dewey, R.J. and Collier, C.J., "Multi-Mode Radio Receiver," <i>Electronics Division Colloquium on Digitally Implemented Radios</i> , IEE, pp. 3/1-3/5 (October 18, 1985).
<i>SP</i>	AR	I	DIALOG File 347 (JAPIO) English Language Patent Abstract for JP 2-276351, 1 page (November 13, 1990 - Date of publication of application).

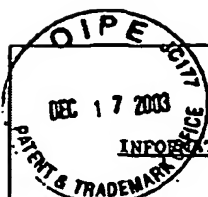
EXAMINER

*[Signature]*

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>SAB</i>	AA8	4,320,536	03/1982	Dietrich			
	AB8	4,346,477	08/1982	Gordy			
	AC8	4,355,401	10/1982	Ikoma et al.			
	AD8	4,356,558	10/1982	Owen et al.			
	AE8	4,360,867	11/1982	Gonda			
	AF8	4,363,132	12/1982	Collin			
	AG8	4,365,217	12/1982	Berger et al.			
	AH8	4,370,572	01/1983	Cosand et al.			
<i>SOB</i>	AI8	4,389,579	06/1983	Stein			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>SAB</i>	AJ8	JP 2-39632 A	02/1990	JP			No
	AK8	JP 2-131629 A	05/1990	JP			No
	AL8	JP 2-276351 A	11/1990	JP			No
<i>SOB</i>	AM8	WO 80/01633 A1	08/1980	PCT			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SAB</i>	AN	8	DIALOG File 347 (JAPIO) English Language Patent Abstract for JP 2-131629, 1 page (May 21, 1990 - Date of publication of application).
	AO	8	DIALOG File 347 (JAPIO) English Language Patent Abstract for JP 2-39632, 1 page (February 8, 1990 - Date of publication of application).
	AP	8	DIALOG File 348 (European Patents) English Language Patent Abstract for EP 0 785 635 A1, 3 pages (December 26, 1996 - Date of publication of application).
	AQ	8	DIALOG File 348 (European Patents) English Language Patent Abstract for EP 35166 A1, 2 pages (February 18, 1981 - Date of publication of application).
<i>SOB</i>	AR	8	"DSO takes sampling rate to 1 Ghz," <i>Electronic Engineering</i> , Morgan Grampian Publishers, Vol. 59, No. 723, pp. 77 and 79 (March 1987).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

DEC 17 2003

FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA9	4,392,255	07/1983	Del Giudice			
	AB9	4,430,629	02/1984	Betzl et al.			
	AC9	4,446,438	05/1984	Chang et al.			
	AD9	4,456,990	08/1984	Fisher et al.			
	AE9	4,472,785	09/1984	Kasuga			
	AF9	4,479,226	10/1984	Prabhu et al.			
	AG9	4,481,490	11/1984	Huntley			
	AH9	4,481,642	11/1984	Hanson			
SP	AI9	4,485,488	11/1984	Houdart			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
SP	AJ9	WO 94/05087 A1	03/1994	PCT			N/A
	AK9	WO 96/02977 A1	02/1996	PCT			N/A
	AL9	WO 96/08078 A1	03/1996	PCT			N/A
SP	AM9	WO 96/39750 A1	12/1996	PCT			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	9	Erdi, G. and Henneuse, P.R., "A Precision FET-Less Sample-and-Hold with High Charge-to-Droop Current Ratio," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-13, No. 6, pp. 864-873 (December 1978).
	AO	9	Faulkner, N.D. and Vilar, E., "Subharmonic Sampling for the Measurement of Short Term Stability of Microwave Oscillators," <i>IEEE Transactions on Instrumentation and Measurement</i> , IEEE, Vol. IM-32, No. 1, pp. 208-213 (March 1983).
	AP	9	Faulkner, N.D. et al., "Sub-Harmonic Sampling for the Accurate Measurement of Frequency Stability of Microwave Oscillators," <i>CPEM 82 Digest: Conference on Precision Electromagnetic Measurements</i> , IEEE, pp. M-10 and M-11 (1982).
	AQ	9	Faulkner, N.D. and Vilar, E., "Time Domain Analysis of Frequency Stability Using Non-Zero Dead-Time Counter Techniques," <i>CPEM 84 Digest Conference on Precision Electromagnetic Measurements</i> , IEEE, pp. 81-82 (1984).
SP	AR	9	Filip, M. and Vilar, E., "Optimum Utilization of the Channel Capacity of a Satellite Link in the Presence of Amplitude Scintillations and Rain Attenuation," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 38, No. 11, pp. 1958-1965 (November 1990).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrelle et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA11	4,602,220	07/1986	Kurihara			
	AB11	4,603,300	07/1986	Welles, II et al.			
	AC11	4,612,464	09/1986	Ishikawa et al.			
	AD11	4,612,518	09/1986	Gans et al.			
	AE11	4,616,191	10/1986	Galani et al.			
	AF11	4,621,217	11/1986	Saxe et al.			
	AG11	4,628,517	12/1986	Schwarz et al.			
	AH11	4,634,998	01/1987	Crawford			
PM	AI11	4,648,021	03/1987	Alberkrack			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
SP	AJ11	EP 0 560 228 A1	09/1993	EP			N/A
	AK11	FR 2 245 130	04/1975	FR			Yes (See AP50)
	AL11	DE 35 41 031 A1	05/1986	DE			Yes (See AR50)
PM	AM11	EP 0 732 803 A1	09/1996	EP			Yes (See AN51)

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	11	Gregorian, R. et al., "Switched-Capacitor Circuit Design," <i>Proceedings of the IEEE</i> , IEEE, Vol. 71, No. 8, pp. 941-966 (August 1983).
	AO	11	Groshong et al., "Undersampling Techniques Simplify Digital Radio," <i>Electronic Design</i> , Penton Publishing, pp. 67-68, 70, 73-75 and 78 (May 23, 1991).
	AP	11	Grove, W.M., "Sampling for Oscilloscopes and Other RF Systems: Dc through X-Band," <i>IEEE Transactions on Microwave Theory and Techniques</i> , IEEE, pp. 629-635 (December 1966).
	AQ	11	Haddon, J. et al., "Measurement of Microwave Scintillations on a Satellite Down-Link at X-Band," <i>Antennas and Propagation</i> , IEE, pp. 113-117 (1981).
PM	AR	11	Haddon, J. and Vilar, E., "Scattering Induced Microwave Scintillations from Clear Air and Rain on Earth Space Paths and the Influence of Antenna Aperture," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE, Vol. AP-34, No. 5, pp. 646-657 (May 1986).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

March 4, 2002

2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
EH	AA12	4,651,034	03/1987	Sato			
	AB12	4,675,882	06/1987	Lilla et al.			
	AC12	4,688,253	08/1987	Gumm			
	AD12	4,716,376	12/1987	Daudelin			
	AE12	4,716,388	12/1987	Jacobs			
	AF12	4,718,113	01/1988	Rother et al.			
	AG12	4,726,041	02/1988	Prohaska et al.			
	AH12	4,733,403	03/1988	Simone			
EH	AI12	4,734,591	03/1988	Ichitsubo			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
EH	AJ12	DE 197 35 798 C1	07/1998	DE			Yes (See AP51)
	AK12	WO 98/40968 A2&A3	09/1998	PCT			N/A
	AL12	EP 0 529 836 A1	03/1993	EP			N/A
EH	AM12	EP 0 795 955 A2&A3	09/1997	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

EH	AN	12	Halldahl, H. et al., "2-4 Ghz MESFET Sampler," <i>Electronics Letters</i> , IEE, Vol. 24, No. 3, pp. 151-153 (February 4, 1988).
	AO	12	Herben, M.H.A.J., "Amplitude and Phase Scintillation Measurements on 8-2 km Line-Of-Sight Path at 30 Ghz," <i>Electronics Letters</i> , IEE, Vol. 18, No. 7, pp. 287-289 (April 1, 1982).
	AP	12	Hewitt, A. et al., "An 18 Ghz Wideband LOS Multipath Experiment," <i>International Conference on Measurements for Telecommunication Transmission Systems - MTTS 85</i> , IEE, pp. 112-116 (November 27-28, 1985)
	AQ	12	Hewitt, A. et al., "An Autoregressive Approach to the Identification of Multipath Ray Parameters from Field Measurements," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 37, No. 11, pp. 1136-1143 (November 1989).
EH	AR	12	Hewitt, A. and Vilar, E., "Selective fading on LOS Microwave Links: Classical and Spread-Spectrum Measurement Techniques," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 36, No. 7, pp. 789-796 (July 1988).

EXAMINER

mnap

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

DEC 17 2003

# INFORMATION DISCLOSURE STATEMENT

APPLICATION NO.  
10/086,250

**FILING DATE**  
**March 4, 2002**

**GROUP  
2686**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
<i>12/</i>	AA13	4,737,969	04/1988	Steel <i>et al.</i>			
	AB13	4,743,858	05/1988	Everard			
	AC13	4,745,463	05/1988	Lu			
	AD13	4,751,468	08/1988	Agoston			
	AE13	4,757,538	07/1988	Zink			
	AF13	4,768,187	08/1988	Marshall			
	AG13	4,769,612	09/1988	Tamakoshi <i>et al.</i>			
	AH13	4,785,463	11/1988	Janc <i>et al.</i>			
<i>12/</i>	AI13	4,791,584	12/1988	Graivenkamp, Jr.			

**RECEIVED**

DEC 18 2003

Technology Center 2600

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
<i>BA</i>	AJ13	EP 0 817 369 A2&A3	01/1998	EP			N/A
	AK13	WO 91/18445 A1	11/1991	PCT			N/A
	AL13	WO 99/23755 A1	05/1999	PCT			N/A
<i>BA</i>	AM13	JP 56-114451 A	09/1981	JP			No

AN	13	Hospitalier, E., "Instruments for Recording and Observing Rapidly Varying Phenomena," <i>Science Abstracts</i> , IEE, Vol. VII, pp. 22-23 (1904).
AO	13	Howard, I.M. and Swansson, N.S., "Demodulating High Frequency Resonance Signals for Bearing Fault Detection," <i>The Institution of Engineers Australia Vibration and Noise Conference</i> , Institution of Engineers, Australia, pp. 115-121 (September 18-20, 1990).
AP	13	Hu, X., <i>A Switched-Current Sample-and-Hold Amplifier for FM Demodulation</i> , Thesis for Master of Applied Science, Dept. of Electrical and Computer Engineering, University of Toronto, UMI Dissertation Services, pp. 1-64 (1995).
AQ	13	Hung, H-L. A. <i>et al.</i> , "Characterization of Microwave Integrated Circuits Using An Optical Phase-Locking and Sampling System," <i>IEEE MTT-S Digest</i> , IEEE, pp. 507-510 (1991).
AR	13	Hurst, P.J., "Shifting the Frequency Response of Switched-Capacitor Filters by Nonuniform Sampling," <i>IEEE Transactions on Circuits and Systems</i> , IEEE Circuits and Systems Society, Vol. 38, No. 1, pp. 12-19 (January 1991).

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
9/10	AA14	4,801,823	01/1989	Yokoyama			
	AB14	4,806,790	02/1989	Sone			
	AC14	4,810,904	03/1989	Crawford			
	AD14	4,810,976	03/1989	Cowley et al.			
	AE14	4,811,362	03/1989	Yester, Jr. et al.			
	AF14	4,819,252	04/1989	Christopher			
	AG14	4,833,445	05/1989	Buchele			
9/10	AH14	4,862,121	08/1989	Hochschild et al.			
	AI14	4,868,654	09/1989	Juri et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
9/10	AJ14	JP 8-32556 A	02/1996	JP			No
	AK14	JP 8-139524 A	05/1996	JP			No
	AL14	JP 59-144249 A	08/1984	JP			No
9/10	AM14	JP 63-54002 A	03/1988	JP			No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

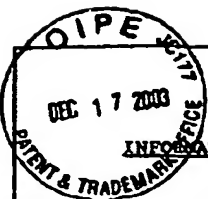
9/10	AN	14	Itakura, T., "Effects of the sampling pulse width on the frequency characteristics of a sample-and-hold circuit," <i>IEE Proceedings Circuits, Devices and Systems</i> , IEE, Vol. 141, No. 4, pp. 328-336 (August 1994).
	AO	14	Janssen, J.M.L., "An Experimental 'Stroboscopic' Oscilloscope for Frequencies up to about 50 Mc/s: I. Fundamentals," <i>Philips Technical Review</i> , Philips Research Laboratories, Vol. 12, No. 2, pp. 52-59 (August 1950).
	AP	14	Janssen, J.M.L. and Michels, A.J., "An Experimental 'Stroboscopic' Oscilloscope for Frequencies up to about 50 Mc/s: II. Electrical Build-Up," <i>Philips Technical Review</i> , Philips Research Laboratories, Vol. 12, No. 3, pp. 73-82 (September 1950).
	AQ	14	Jondral, V.F. et al., "Doppler Profiles for Communication Satellites," <i>Frequenz</i> , Herausberger, pp. 111-116 (May-June 1996).
9/10	AR	14	Kaleh, G.K., "A Frequency Diversity Spread Spectrum System for Communication in the Presence of In-band Interference," <i>1995 IEEE Globecom</i> , IEEE Communications Society, pp. 66-70 (1995).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
9/2	AA15	4,870,659	09/1989	Oishi et al.			
	AB15	4,871,987	10/1989	Kawase			
	AC15	4,885,587	12/1989	Wiegand et al.			
	AD15	4,885,756	12/1989	Fontanes et al.			
	AE15	4,888,557	12/1989	Puckette, IV et al.			
	AF15	4,890,302	12/1989	Muitwijk			
	AG15	4,893,316	01/1990	Janc et al.			
	AH15	4,893,341	01/1990	Gehring			
9/2	AI15	4,894,766	01/1990	De Agro			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
9/2	AJ15	JP 6-237276 A	08/1994	JP			No
	AK15	JP 8-23359 A	01/1996	JP			No
	AL15	JP 47-2314 A	02/1972	JP			Yes (Doc. AP53)
9/2	AM15	JP 58-7903 A	01/1983	JP			Partial (Doc. AQ53)

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

9/2	AN	15	Karasawa, Y. et al., "A New Prediction Method for Tropospheric Scintillation on Earth-Space Paths," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE Antennas and Propagation Society, Vol. 36, No. 11, pp. 1608-1614 (November 1988).
	AO	15	Kirsten, J. and Fleming, J., "Undersampling reduces data-acquisition costs for select applications," <i>EDN</i> , Cahners Publishing, Vol. 35, No. 13, pp. 217-222, 224, 226-228 (June 21, 1990).
	AP	15	Lam, W.K. et al., "Measurement of the Phase Noise Characteristics of an Unlocked Communications Channel Identifier," <i>Proceedings Of the 1993 IEEE International Frequency Control Symposium</i> , IEEE, pp. 283-288 (June 2-4, 1993).
	AQ	15	Lam, W.K. et al., "Wideband sounding of 11.6 Ghz transhorizon channel," <i>Electronics Letters</i> , IEE, Vol. 30, No. 9, pp. 738-739 (April 28, 1994).
9/2	AR	15	Larkin, K.G., "Efficient demodulator for bandpass sampled AM signals," <i>Electronics Letters</i> , IEE, Vol. 32, No. 2, pp. 101-102 (January 18, 1996).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SM	AA16	4,896,152	01/1990	Tiemann			
	AB16	4,902,979	02/1990	Puckette, IV			
	AC16	4,908,579	03/1990	Tawfik et al.			
	AD16	4,910,752	03/1990	Yester, Jr. et al.			
	AE16	4,914,405	04/1990	Wells			
	AF16	4,920,510	04/1990	Senderowicz et al.			
	AG16	4,922,452	05/1990	Larsen et al.			
	AH16	4,931,921	06/1990	Anderson			
SM	AI16	4,944,025	07/1990	Gehring et al.			

RECEIVED

DEC 18 2003

Technology Center 2800

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
SM	AJ16	JP 58-133004 A	08/1983	JP			No
	AK16	JP 60-58705 A	04/1985	JP			No
	AL16	JP 4-123614 A	04/1992	JP			No
SM	AM16	JP 4-127601 A	04/1992	JP			No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SM	AN	16	Lau, W.H. et al., "Analysis of the Time Variant Structure of Microwave Line-of-sight Multipath Phenomena," <i>IEEE Global Telecommunications Conference &amp; Exhibition</i> , IEEE, pp. 1707-1711 (November 28 - December 1, 1988).
	AO	16	Lau, W.H. et al., "Improved Prony Algorithm to Identify Multipath Components," <i>Electronics Letters</i> , IEE, Vol. 23, No. 20, pp. 1059-1060 (September 24, 1987).
	AP	16	Lesage, P. and Audoin, C., "Effect of Dead-Time on the Estimation of the Two-Sample Variance," <i>IEEE Transactions on Instrumentation and Measurement</i> , IEEE Instrumentation and Measurement Society, Vol. IM-28, No. 1, pp. 6-10 (March 1979).
	AQ	16	Liechti, C.A., "Performance of Dual-gate GaAs MESFET's as Gain-Controlled Low-Noise Amplifiers and High-Speed Modulators," <i>IEEE Transactions on Microwave Theory and Techniques</i> , IEEE Microwave Theory and Techniques Society, Vol. MTT-23, No. 6, pp. 461-469 (June 1975).
SM	AR	16	Linnenbrink, T.E. et al., "A One Gigasample Per Second Transient Recorder," <i>IEEE Transactions on Nuclear Science</i> , IEEE Nuclear and Plasma Sciences Society, Vol. NS-26, No. 4, pp. 4443-4449 (August 1979).

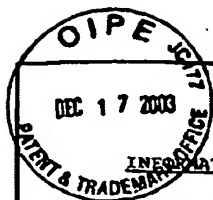
EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
EB	AA18	5,006,810	04/1991	Popescu			
	AB18	5,010,585	04/1991	Garcia			
	AC18	5,014,304	05/1991	Nicollini et al.			
	AD18	5,015,963	05/1991	Sutton			
	AE18	5,017,924	05/1991	Guilbertau et al.			
	AF18	5,020,149	05/1991	Hemmie			
	AG18	5,020,154	05/1991	Zierhut			
	AH18	5,052,050	09/1991	Collier et al.			
EB	AI18	5,065,409	11/1991	Hughes et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
EB	AJ18	JP 55-66057 A	05/1980	JP			No
	AK18	JP 63-65587 A	03/1988	JP			No
	AL18	JP 63-153691 A	06/1988	JP			No
EB	AM18	EP 0 276 130 A2&A3	07/1988	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

EB	AN	18	Marsland, R.A. et al., "130 Ghz GaAs monolithic integrated circuit sampling head," <i>Appl. Phys. Lett.</i> , American Institute of Physics, Vol. 55, No. 6, pp. 592-594 (August 7, 1989).
	AO	18	Martin, K. and Sadra, A.S., "Switched-Capacitor Building Blocks for Adaptive Systems," <i>IEEE Transactions on Circuits and Systems</i> , IEEE Circuits and Systems Society, Vol. CAS-28, No. 6, pp. 576-584 (June 1981).
	AP	18	Marzano, F.S. and d'Auria, G., "Model-based Prediction of Amplitude Scintillation variance due to Clear-Air Tropospheric Turbulence on Earth-Satellite Microwave Links," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE Antennas and Propagation Society, Vol. 46, No. 10, pp. 1508-1518 (October 1998).
	AQ	18	Matricciani, E., "Prediction of fade durations due to rain in satellite communication systems," <i>Radio Science</i> , American Geophysical Union, Vol. 32, No. 3, pp. 935-941 (May-June 1997).
EB	AR	18	McQueen, J.G., "The Monitoring of High-Speed Waveforms," <i>Electronic Engineering</i> , Morgan Brothers Limited, Vol. XXIV, No. 296, pp. 436-441 (October 1952).

EXAMINER

EB

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SB	AA19	5,083,050	01/1992	Vasile			
	AB19	5,091,921	02/1992	Minami			
	AC19	5,095,533	03/1992	Loper et al.			
	AD19	5,095,536	03/1992	Loper			
	AE19	5,111,152	05/1992	Makino			
	AF19	5,113,094	05/1992	Grace et al.			
	AG19	5,113,129	05/1992	Hughes			
	AH19	5,122,765	06/1992	Pataut			
SB	AI19	5,124,592	06/1992	Hagino			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
SB	AJ19	WO 95/01006 A1	01/1995	PCT			N/A
	AK19	WO 97/08839 A2&A3	03/1997	PCT			N/A
	AL19	EP 0 254 844 A2	02/1988	EP			N/A
SB	AM19	EP 0 632 577 A1	01/1995	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SB	AN	19	Merkelo, J. and Hall, R.D., "Broad-Band Thin-Film Signal Sampler," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-7, No. 1, pp. 50-54 (February 1972).
	AO	19	Merlo, U. et al., "Amplitude Scintillation Cycles in a Sino Satellite-Earth Link," <i>Electronics Letters</i> , IEE, Vol. 21, No. 23, pp. 1094-1096 (November 7, 1985).
	AP	19	Morris, D., "Radio-holographic reflector measurement of the 30-m millimeter radio telescope at 22 Ghz with a cosmic signal source," <i>Astronomy and Astrophysics</i> , Springer-Verlag, Vol. 203, No. 2, pp. 399-406 (September (II) 1988).
	AQ	19	Moutisley, T.J. et al., "The efficient acquisition and processing of propagation statistics," <i>Journal of the Institution of Electronic and Radio Engineers</i> , IERE, Vol. 55, No. 3, pp. 97-103 (March 1985).
SB	AR	19	Ndzi, D. et al., "Wide-Band Statistical Characterization of an Over-the-Sea Experimental Transhorizon Link," <i>IEE Colloquium on Radio Communications at Microwave and Millimetre Wave Frequencies</i> , IEE, pp. 1/1-1/6 (December 16, 1996).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>SL</i>	AA20	5,136,267	08/1992	Cabot			
	AB20	5,140,705	08/1992	Kosuga			
	AC20	5,150,124	09/1992	Moore et al.			
	AD20	5,151,661	09/1992	Caldwell et al.			
	AE20	5,159,710	10/1992	Cusdin			
	AF20	5,170,414	12/1992	Silvian			
	AG20	5,172,070	12/1992	Hirawa et al.			
	AH20	5,191,459	03/1993	Thompson et al.			
<i>SL</i>	AI20	5,204,642	04/1993	Ashgar et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>SL</i>	AJ20	JP 60-130203 A	07/1985	JP			Yes (Doc. AO56)
	AK20	DE 196 27 640 A1	01/1997	DE			No
	AL20	EP 0 087 336 A1	08/1983	EP			No
<i>SL</i>	AM20	EP 0 087 336 B1	07/1986	EP			No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)


<i>SL</i>	AN	20	Ndzi, D. et al., "Wideband Statistics of Signal Levels and Doppler Spread on an Over-The-Sea Transhorizon Link," IEE Colloquium on Propagation Characteristics and Related System Techniques for Beyond Line-of-Sight Radio, IEE, pp. 9/1-9/6 (November 24, 1997).
	AO	20	"New zero IF chipset from Philips," <i>Electronic Engineering</i> , United News & Media, Vol. 67, No. 825, p. 10 (September 1995).
	AP	20	Ohara, H. et al., "First monolithic PCM filter cuts cost of telecomm systems," <i>Electronic Design</i> , Hayden Publishing Company, Vol. 27, No. 8, pp. 130-135 (April 12, 1979).
	AQ	20	Oppenheim, A.V. et al., <i>Signals and Systems</i> , Prentice-Hall, pp. 527-531 and 561-562 (1983).
<i>SL</i>	AR	20	Ortgies, G., "Experimental Parameters Affecting Amplitude Scintillation Measurements on Satellite Links," <i>Electronics Letters</i> , IEE, Vol. 21, No. 17, pp. 771-772 (August 15, 1985).

EXAMINER

DATE CONSIDERED

12/18/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.


 FORM PTO-1449  
**INFORMATION DISCLOSURE STATEMENT**

 ATTY. DOCKET NO.  
 1744.0140006

 APPLICATION NO.  
 10/086,250

 APPLICANTS  
 Sorrells et al.

 FILING DATE  
 March 4, 2002

 GROUP  
 2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SAB	AA21	5,212,827	05/1993	Meszko et al.			
	AB21	5,214,787	05/1993	Karkota, Jr.			
	AC21	5,220,583	06/1993	Solomon			
	AD21	5,220,680	06/1993	Lee			
	AE21	5,222,144	06/1993	Whitehart			
	AF21	5,230,097	07/1993	Curie et al.			
	AG21	5,239,686	08/1993	Downey			
	AH21	5,241,561	08/1993	Barnard			
90	AI21	5,249,203	09/1993	Loper			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
SAB	AJ21	EP 0 789 449 A2 & A3	08/1997	EP			N/A
	AK21	FR 2 669 787 A1	05/1992	FR			No
	AL21	GB 2 324 919 A	11/1998	GB			N/A
SAB	AM21	JP 61-30821 A	02/1986	JP			No

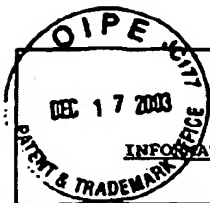
## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SAB	AN	21	Pärssinen et al., "A 2-GHz Subharmonic Sampler for Signal Downconversion," <i>IEEE Transactions on Microwave Theory and Techniques</i> , IEEE, Vol. 45, No. 12, 7 pages (December 1997).
	AO	21	Peeters, G. et al., "Evaluation of Statistical Models for Clear-Air Scintillation Prediction Using Olympus Satellite Measurements," <i>International Journal of Satellite Communications</i> , John Wiley and Sons, Vol. 15, No. 2, pp. 73-88 (March-April 1997).
	AP	21	Perrey, A.G. and Schoenwetter, H.K., <i>NBS Technical Note 1121: A Schottky Diode Bridge Sampling Gate</i> , U.S. Dept. of Commerce, pp. 1-14 (May 1980).
	AQ	21	Poulton, K. et al., "A 1-GHz 6-bit ADC System," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-22, No. 6, pp. 952-959 (December 1987).
SAB	AR	21	Press Release, "Parkervision, Inc. Announces Fiscal 1993 Results," Lippert/Heilshorn and Associates, 2 Pages (April 6, 1994).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered. Whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA22	5,251,218	10/1993	Stone et al.			
	AB22	5,251,232	10/1993	Nonami			
	AC22	5,260,970	11/1993	Henry et al.			
	AD22	5,263,194	11/1993	Ragan			
	AE22	5,263,196	11/1993	Jasper			
	AF22	5,267,023	11/1993	Kawasaki			
	AG22	5,278,826	01/1994	Murphy et al.			
	AH22	5,282,023	01/1994	Scarpa			
SP	AI22	5,287,516	02/1994	Schaub			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
SP	AJ22	JP 5-327356 A	12/1993	JP			No
	AK22	EP 0 643 477 A2&A3	03/1995	EP			N/A
	AL22	EP 0 877 476 A1	11/1998	EP			N/A
SP	AM22	EP 0 977 351 A1	02/2000	EP			N/A

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	22	Press Release, "Parkervision, Inc. Announces the Appointment of Michael Baker to the New Position of National Sales Manager," Lippert/Heilshorn and Associates, 1 Page (April 7, 1994).
	AO	22	Press Release, "Parkervision's Cameraman Well-Received By Distance Learning Market," Lippert/Heilshorn and Associates, 2 Pages (April 8, 1994).
	AP	22	Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Lippert/Heilshorn and Associates, 2 Pages (April 26, 1994).
	AQ	22	Press Release, "Parkervision, Inc. Announces The Retirement of William H. Fletcher, Chief Financial Officer," Lippert/Heilshorn and Associates, 1 Page (May 11, 1994).
SP	AR	22	Press Release, "Parkervision, Inc. Announces New Cameraman System II™ At Infocomm Trade Show," Lippert/Heilshorn and Associates, 3 Pages (June 9, 1994).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744-0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA23	5,293,398	03/1994	Hamao et al.			
	AB23	5,303,417	04/1994	Laws			
	AC23	5,307,517	04/1994	Rich			
	AD23	5,315,583	05/1994	Murphy et al.			
	AE23	5,321,852	06/1994	Seong			
	AF23	5,325,204	06/1994	Scarpa			
	AG23	5,337,014	08/1994	Najie et al.			
	AH23	5,339,054	08/1994	Taguchi			
SP	AI23	5,339,459	08/1994	Schiltz et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
SP	AJ23	WO 00/31659 A1	08/2000	PCT			N/A
SP	AK23	JP 9-36664 A	02/1997	JP			No
SP	AL						Yes No
SP	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	23	Press Release, "Parkervision, Inc. Announces Appointments to its National Sales Force," Lippert/Heilshorn and Associates, 2 Pages (June 17, 1994).				
	AO	23	Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," Lippert/Heilshorn and Associates, 3 Pages (August 9, 1994).				
	AP	23	Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," Lippert/Heilshorn and Associates, 3 Pages (October 28, 1994).				
	AQ	23	Press Release, "Parkervision, Inc. Announces First Significant Dealer Sale of its Cameraman® System II," Lippert/Heilshorn and Associates, 2 Pages (November 7, 1994).				
SP	AR	23	Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Results," Lippert/Heilshorn and Associates, 2 Pages (March 1, 1995).				

EXAMINER

DATE CONSIDERED

12/16/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>EP</i>	AA24	5,355,114	10/1994	Sutterlin et al.			
	AB24	5,361,408	11/1994	Watanabe et al.			
	AC24	5,369,800	11/1994	Takagi et al.			
	AD24	5,375,146	12/1994	Chalmers			
	AE24	5,379,040	01/1995	Mizomoto et al.			
	AF24	5,379,141	01/1995	Thompson et al.			
	AG24	5,388,063	02/1995	Takatori et al.			
	AH24	5,390,364	02/1995	Webster et al.			
<i>EP</i>	AI24	5,400,084	03/1995	Scarpa			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>EP</i>	AJ						Yes No
<i>EP</i>	AK						Yes No
<i>EP</i>	AL						Yes No
<i>EP</i>	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>EP</i>	AN	24	Press Release, "Parkervision, Inc. Announces Joint Product Developments With VTEL," Lippert/Heilshorn and Associates, 2 Pages (March 21, 1995).
	AO	24	Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Lippert/Heilshorn and Associates, 3 Pages (April 28, 1995).
	AP	24	Press Release, "Parkervision Wins Top 100 Product Districts' Choice Award," Parkervision Marketing and Manufacturing Headquarters, 1 Page (June 29, 1995).
	AQ	24	Press Release, "Parkervision National Sales Manager Next President of USDLA," Parkervision Marketing and Manufacturing Headquarters, 1 Page (July 6, 1995).
<i>EP</i>	AR	24	Press Release, "Parkervision Granted New Patent," Parkervision Marketing and Manufacturing Headquarters, 1 Page (July 21, 1995).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086.250APPLICANTS  
Sorrente et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
EP	AA25	5,404,127	04/1995	Lee et al.			
	AB25	5,410,541	04/1995	Hotto			
	AC25	5,410,743	04/1995	Seely et al.			
	AD25	5,412,352	05/1995	Graham			
	AE25	5,416,803	05/1995	Janer			
	AF25	5,422,913	06/1995	Wilkinson			
	AG25	5,423,082	06/1995	Cygan et al.			
	AH25	5,428,638	06/1995	Cioffi et al.			
EP	AI25	5,428,640	06/1995	Townley			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
EP	AJ						Yes No
EP	AK						Yes No
EP	AL						Yes No
EP	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

EP	AN	25	Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 31, 1995).				
	AO	25	Press Release, "Parkervision, Inc. Expands Its Cameraman System II Product Line," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (September 22, 1995).				
	AP	25	Press Release, "Parkervision Announces New Camera Control Technology," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 25, 1995).				
	AQ	25	Press Release, "Parkervision, Inc. Announces Completion of VTEL/Parkervision Joint Product Line," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1995).				
EP	AR	25	Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1995).				

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
<i>SK</i>	AA26	5,434,546	07/1995	Palmer			
	AB26	5,438,692	08/1995	Mohindra			
	AC26	5,444,415	08/1995	Dent et al.			
	AD26	5,444,416	08/1995	Ishikawa et al.			
	AE26	5,444,865	08/1995	Heck et al.			
	AF26	5,446,421	08/1995	Kechkaylo			
	AG26	5,446,422	08/1995	Mattila et al.			
	AH26	5,448,602	09/1995	Ohmori et al.			
<i>SK</i>	AI26	5,451,899	09/1995	Lawton			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
<i>SK</i>	AJ						Yes No
<i>SK</i>	AK						Yes No
<i>SK</i>	AL						Yes No
<i>SK</i>	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SK</i>	AN	26	Press Release, "Parkervision's Cameraman Personal Locator Camera System Wins Telecon XV Award," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (November 1, 1995).
	AO	26	Press Release, "Parkervision, Inc. Announces Purchase Commitment From VTEL Corporation," Parkervision Marketing and Manufacturing Headquarters, 1 Page (February 26, 1996).
	AP	26	Press Release, "ParkerVision, Inc. Announces Fourth Quarter and Year End Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (February 27, 1996).
	AQ	26	Press Release, "ParkerVision, Inc. Expands its Product Line," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (March 7, 1996).
<i>SK</i>	AR	26	Press Release, "ParkerVision Files Patents for its Research of Wireless Technology," Parkervision Marketing and Manufacturing Headquarters, 1 Page (March 28, 1996).

EXAMINER

*Embl...*

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrelle et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA27	5,454,007	09/1995	Dutta			
	AB27	5,454,009	09/1995	Fruit et al.			
	AC27	5,463,356	10/1995	Palmer			
	AD27	5,463,357	10/1995	Hobden			
	AE27	5,465,071	11/1995	Kobayashi et al.			
	AF27	5,465,410	11/1995	Hiben et al.			
	AG27	5,465,415	11/1995	Bien			
	AH27	5,471,162	11/1995	McEwan			
SP	AI27	5,479,120	12/1995	McEwan			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
SP	AJ						Yes No
SP	AK						Yes No
SP	AL						Yes No
SP	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	27	Press Release, "Parkervision, Inc. Announces First Significant Sale of Its Cameraman® Three-Chip System," Parkervision Marketing and Manufacturing Headquarters, 2 pages (April 12, 1996).
	AO	27	Press Release, "Parkervision, Inc. Introduces New Product Line For Studio Production Market," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (April 15, 1996).
	AP	27	Press Release, "Parkervision, Inc. Announces Private Placement of 800,000 Shares," Parkervision Marketing and Manufacturing Headquarters, 1 Page (April 15, 1996).
	AQ	27	Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (April 30, 1996).
SP	AR	27	Press Release, "Parkervision's New Studio Product Wins Award," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (June 5, 1996).

EXAMINER

SP

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SB	AA28	5,479,447	12/1995	Chow et al.			
	AB28	5,483,193	01/1996	Kennedy et al.			
	AC28	5,483,549	01/1996	Weinberg et al.			
	AD28	5,483,691	01/1996	Heck et al.			
	AE28	5,490,173	02/1996	Whitehart et al.			
	AF28	5,493,581	02/1996	Young et al.			
	AG28	5,493,721	02/1996	Reis			
	AH28	5,495,200	02/1996	Kwan et al.			
SB	AI28	5,495,202	02/1996	Hsu			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
C	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SB	AN	28	Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (August 1, 1996).
	AO	28	Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 29, 1996).
	AP	28	Press Release, "PictureTel and ParkerVision Sign Reseller Agreement," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1996).
	AQ	28	Press Release, "CLI and ParkerVision Bring Enhanced Ease-of-Use to Videoconferencing," CLI/Parkervision, 2 Pages (January 20, 1997).
SN	AR	28	Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (February 27, 1997).

EXAMINER

SM

DATE CONSIDERED

12/20/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SP	AA29	5,485,500	02/1996	Jovanovich et al.			
	AB29	5,499,267	03/1996	Ohe et al.			
	AC29	5,500,758	03/1996	Thompson et al.			
	AD29	5,517,688	05/1996	Fajen et al.			
	AE29	5,519,890	05/1996	Pinckley			
	AF29	5,523,719	06/1996	Longo et al.			
	AG29	5,523,726	06/1996	Kroeger et al.			
	AH29	5,523,760	06/1996	McEwan			
SP	AI29	5,539,770	07/1996	Ishigaki			

RECEIVED

DEC 18 2003

Technology Center 2000

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	29	Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (April 29, 1997).
	AO	29	Press Release, "NEC and Parkervision Make Distance Learning Closer," NEC America, 2 Pages (June 18, 1997).
	AP	29	Press Release, "Parkervision Supplies JPL with Robotic Cameras, Cameraman Shot Director for Mars Mission," Parkervision Marketing and Manufacturing Headquarters, 2 pages (July 8, 1997).
	AQ	29	Press Release, "ParkerVision and IBM Join Forces to Create Wireless Computer Peripherals," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 23, 1997).
SP	AR	29	Press Release, "ParkerVision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (July 31, 1997).

EXAMINER

SP/hrs

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

**INFORMATION DISCLOSURE STATEMENT**

**APPLICATION NO.**  
**10/086,250**

**FILING DATE**  
**March 4, 2002**

**GROUP  
2686**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
JB	AA30	5,555,453	09/1996	Kajimoto <i>et al.</i>			
	AB30	5,557,641	09/1996	Weinberg			
	AC30	5,557,642	09/1996	Williams			
	AD30	5,579,341	11/1996	Smith <i>et al.</i>			
	AE30	5,579,347	11/1996	Lindquist <i>et al.</i>			
	AF30	5,584,068	12/1996	Mohindra			
	AG30	5,592,131	01/1997	Labreche <i>et al.</i>			
	AH30	5,602,847	02/1997	Pagano <i>et al.</i>			
SH	AI30	5,602,868	02/1997	Wilson			

**RECEIVED**

DEC 18 2003


Technology Center 2600

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

24	AN	<u>30</u>	Press Release, "Parkervision, Inc. Announces Private Placement of 990,000 Shares," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (September 8, 1997).
	AO	<u>30</u>	Press Release, "Wal-Mart Chooses Parkervision for Broadcast Production," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 24, 1997).
	AP	<u>30</u>	Press Release, "Parkervision, Inc. Announces Third Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (October 30, 1997).
	AQ	<u>30</u>	Press Release, "ParkerVision Announces Breakthrough in Wireless Radio Frequency Technology," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (December 10, 1997).
87	AR	<u>30</u>	Press Release, "Parkervision, Inc. Announces the Appointment of Joseph F. Skovron to the Position of Vice President, Licensing - Wireless Technologies," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (January 9, 1998).

DATE CONSIDERED

==ODMA\ODMA\SKCF\_DC1205473;1


 FORM PTO-1449  
 INFORMATION DISCLOSURE STATEMENT

 ATTY. DOCKET NO.  
 1744.0140006

 APPLICATION NO.  
 10/086,250

 APPLICANTS  
 Sorrells et al.

 FILING DATE  
 March 4, 2002

 GROUP  
 2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
Sh	AA31	5,604,732	02/1997	Kim et al.			
	AB31	5,608,531	03/1997	Honda et al.			
	AC31	5,610,946	03/1997	Tanaka et al.			
	AD31	RE 35,494	04/1997	Nicollini			
	AE31	5,617,451	04/1997	Mimura et al.			
	AF31	5,619,538	04/1997	Sempel et al.			
	AG31	5,621,455	04/1997	Rogers et al.			
	AH31	5,630,227	05/1997	Bella et al.			
SP	AI31	5,640,415	06/1997	Pandua			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	31	Press Release, "Parkervision Announces Existing Agreement with IBM Terminates-- Company Continues with Strategic Focus Announced in December," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (January 27, 1998).				
	AO	31	Press Release, "Laboratory Tests Verify Parkervision Wireless Technology," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (March 3, 1998).				
	AP	31	Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (March 5, 1998).				
	AQ	31	Press Release, "Parkervision Awarded Editors' Pick of Show for NAB 98," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (April 15, 1998).				
SP	AR	31	Press Release, "Parkervision Announces First Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (May 4, 1998).				

EXAMINER	<i>SP</i>	DATE CONSIDERED	12/10/04
----------	-----------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA32	5,640,424	06/1997	Banavong et al.			
	AB32	5,640,428	06/1997	Abe et al.			
	AC32	5,640,698	06/1997	Shen et al.			
	AD32	5,648,985	07/1997	Bjerede et al.			
	AE32	5,650,785	07/1997	Rodal			
	AF32	5,661,424	08/1997	Tang			
	AG32	5,663,878	09/1997	Walker			
	AH32	5,663,986	09/1997	Striffler			
	AJ32	5,668,836	09/1997	Smith et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	32	Press Release, "Parkervision 'DIRECT2DATA' Introduced in Response to Market Demand," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (July 9, 1998).
	AO	32	Press Release, "Parkervision Expands Senior Management Team," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 29, 1998).
	AP	32	Press Release, "Parkervision Announces Second Quarter and Six Month Financial Results," Parkervision Marketing and Manufacturing Headquarters, 4 Pages (July 30, 1998).
	AQ	32	Press Release, "Parkervision Announces Third Quarter and Nine Month Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (October 30, 1998).
SM	AR	32	Press Release, "Questar Infocomm, Inc. Invests \$5 Million in Parkervision Common Stock," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (December 2, 1998).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrelle et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SB	AA34	5,724,002	03/1998	Hutick			
	AB34	5,724,653	03/1998	Baker et al.			
	AC34	5,729,577	03/1998	Chen			
	AD34	5,729,626	03/1998	Tahwar et al.			
	AE34	5,732,333	03/1998	Cox et al.			
	AF34	5,736,895	04/1998	Yu et al.			
	AG34	5,737,035	04/1998	Rotzoll			
	AH34	5,742,189	04/1998	Yoshida et al.			
SP	AI34	5,748,683	05/1998	Smith et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SA	AN	34	Reeves, R.J.D., "The Recording and Collocation of Waveforms (Part 1)," <i>Electronic Engineering</i> , Morgan Brothers Limited, Vol. 31, No. 373, pp. 130-137 (March 1959).
	AO	34	Reeves, R.J.D., "The Recording and Collocation of Waveforms (Part 2)," <i>Electronic Engineering</i> , Morgan Brothers Limited, Vol. 31, No. 374, pp. 204-212 (April 1959).
	AP	34	Rein, H.M. and Zahn, M., "Subnanosecond-Pulse Generator with Variable Pulsewidth Using Avalanche Transistors," <i>Electronics Letters</i> , IEE, Vol. 11, No. 1, pp. 21-23 (January 9, 1975).
	AQ	34	Riad, S.M. and Nahman, N.S., "Modeling of the Feed-through Wideband (DC to 12.4 Ghz) Sampling-Head," <i>IEEE MTT-S International Microwave Symposium Digest</i> , IEEE, pp. 267-269 (June 27-29, 1978).
SH	AR	34	Rizzoli, V. et al., "Computer-Aided Noise Analysis of MESFET and HEMT Mixers," <i>IEEE Transactions on Microwave Theory and Techniques</i> , IEEE, Vol. 37, No. 9, pp. 1401-1410 (September 1989).

EXAMINER

SM

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrelle et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SP	AA35	RE 35,829	06/1998	Sanderford, Jr.			
	AB35	5,760,645	06/1998	Comte et al.			
	AC35	5,764,087	06/1998	Clark			
	AD35	5,767,726	06/1998	Wang			
	AE35	5,768,118	06/1998	Faulk et al.			
	AF35	5,771,442	06/1998	Wang et al.			
	AG35	5,777,692	07/1998	Ghosh			
	AH35	5,777,771	07/1998	Smith			
SP	AI35	5,786,844	07/1998	Rogers et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	35	Rowe, H.E., <i>Signals and Noise in Communication Systems</i> , D. Van Nostrand Company, Inc., Princeton, New Jersey, including, for example, Chapter V, Pulse Modulation Systems (1965).				
	AO	35	Rücker, F. and Dintelmann, F., "Effect of Antenna Size on OTS Signal Scintillations and Their Seasonal Dependence," <i>Electronics Letters</i> , IEE, Vol. 19, No. 24, pp. 1032-1034 (November 24, 1983).				
	AP	35	Russell, R. and Hoare, L., "Millimeter Wave Phase Locked Oscillators," <i>Military Microwaves 78 Conference Proceedings</i> , Microwave Exhibitions and Publishers, pp. 238-242 (October 25-27, 1978).				
	AQ	35	Sabel, L.P., "A DSP Implementation of a Robust Flexible Receiver/Demultiplexer for Broadcast Data Satellite Communications," <i>The Institution of Engineers Australia Communications Conference</i> , Institution of Engineers, Australia, pp. 218-223 (October 16-18, 1990).				
SP	AR	35	Salous, S., "IF digital generation of FMCW waveforms for wideband channel characterization," <i>IEE Proceedings</i> , I, IEE, Vol. 139, No. 3, pp. 281-288 (June 1992).				

EXAMINER

mm

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



**FORM PTO-1449**

**INFORMATION DISCLOSURE STATEMENT**

ATTY. DOCKET NO.  
1744.0140006

**APPLICATION NO.**  
**10/086,250**

**APPLICANTS**  
**Sorrells et al.**

**FILING DATE**  
**March 4, 2002**

**GROUP  
2686**

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SB	AA37	5,892,380	04/1999	Quist			
	AB37	5,894,239	04/1999	Bonaccio <i>et al.</i>			
	AC37	5,898,562	04/1999	Heinonen			
	AD37	5,900,747	05/1999	Brauns			
	AE37	5,901,054	05/1999	Leu <i>et al.</i>			
	AF37	5,901,187	05/1999	linuma			
	AG37	5,901,344	05/1999	Opas			
	AH37	5,901,347	05/1999	Chambers <i>et al.</i>			
SB	AI37	5,901,348	05/1999	Bang <i>et al.</i>			

**RECEIVED**

DEC 18 2003

Technology Center 2600

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

SM	AN	<u>37</u>	Shen, X. and Tawfik, A.N., "Dynamic Behaviour of Radio Channels Due to Trans-Horizon Propagation Mechanisms," <i>Electronics Letters</i> , IEE, Vol. 29, No. 17, pp. 1582-1583 (August 19, 1993).
	AO	<u>37</u>	Shen, X. et al., "Modeling Enhanced Spherical Diffraction and Troposcattering on a Transhorizon Path with aid of the parabolic Equation and Ray Tracing Methods," <i>IEE Colloquium on Common modeling techniques for electromagnetic wave and acoustic wave propagation</i> , IEE, pp. 4/1-4/7 (March 8, 1996).
	AP	<u>37</u>	Shen, X. and Vilar, E., "Path loss statistics and mechanisms of transhorizon propagation over a sea path," <i>Electronics Letters</i> , IEE, Vol. 32, No. 3, pp. 259-261 (February 1, 1996).
	AQ	<u>37</u>	Shen, D. et al., "A 900 MHZ Integrated Discrete-Time Filtering RF Front-End," <i>IEEE International Solid State Circuits Conference</i> , IEEE, Vol. 39, pp. 54-55 and 417 (February 1996).
GM	AR	<u>37</u>	Spillard, C. et al., "X-Band Tropospheric Transhorizon Propagation Under Differing Meteorological Conditions," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 451-455 (April 4-7, 1989).

**EXAMINER**

DATE CONSIDERED 12/10/04

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
5/17	AA38	5,901,349	05/1999	Guegnaud et al.			
	AB38	5,903,178	05/1999	Miyatsuji et al.			
	AC38	5,903,187	05/1999	Claverie et al.			
	AD38	5,903,196	05/1999	Salvi et al.			
	AE38	5,903,421	05/1999	Furutani et al.			
	AF38	5,903,553	05/1999	Sakamoto et al.			
	AG38	5,903,595	05/1999	Suzuki			
	AH38	5,903,609	05/1999	Kool et al.			
5/18	AI38	5,903,827	05/1999	Kennan et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

5/17	AN	38	Stafford, K.R. et al., "A Complete Monolithic Sample/Hold Amplifier," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-9, No. 6, pp. 381-387 (December 1974).				
	AO	38	Staruk, W. Jr. et al., "Pushing HF Data Rates," <i>Defense Electronics</i> , EW Communications, Vol. 17, No. 5, pp. 211, 213, 215, 217, 220 and 222 (May 1985).				
	AP	38	Stephenson, A.G., "Digitizing multiple RF signals requires an optimum sampling rate," <i>Electronics</i> , McGraw-Hill, pp. 106-110 (March 27, 1972).				
	AQ	38	Sugarman, R., "Sampling Oscilloscope for Statistically Varying Pulses," <i>The Review of Scientific Instruments</i> , American Institute of Physics, Vol. 28, No. 11, pp. 933-938 (November 1957).				
5/18	AR	38	Sylvain, M., "Experimental probing of multipath microwave channels," <i>Radio Science</i> , American Geophysical Union, Vol. 24, No. 2, pp. 160-178 (March-April 1989).				

EXAMINER

Smm

DATE CONSIDERED

12/6/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sortells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
57	AA39	5,903,854	05/1999	Abe et al.			
	AB39	5,905,449	05/1999	Tsubouchi et al.			
	AC39	5,907,149	05/1999	Marckini			
	AD39	5,907,197	05/1999	Faultk			
	AE39	5,911,118	06/1999	Nosswitz			
	AF39	5,911,123	06/1999	Shaffer et al.			
	AG39	5,914,622	06/1999	Inoue			
	AH39	5,920,199	07/1999	Sauer			
56	AI39	5,943,370	08/1999	Smith			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

58	AN	39	Takano, T., "NOVEL GaAs Pst Phase Detector Operable To Ka Band," <i>IEEE MT-S Digest</i> , IEEE, pp. 381-383 (1984).				
	AO	39	Tan, M.A., "Biquadratic Transconductance Switched-Capacitor Filters," <i>IEEE Transactions on Circuits and Systems- I: Fundamental Theory and Applications</i> , IEEE Circuits and Systems Society, Vol. 40, No. 4, pp. 272-275 (April 1993).				
	AP	39	Tanaka, K. et al., "Single Chip Multisystem AM Stereo Decoder IC," <i>IEEE Transactions on Consumer Electronics</i> , IEEE Consumer Electronics Society, Vol. CE-32, No. 3, pp. 482-496 (August 1986).				
	AQ	39	Tawfik, A.N., "Amplitude, Duration and Predictability of Long Hop Trans-Horizon X-band Signals Over the Sea," <i>Electronics Letters</i> , IEE, Vol. 28, No. 6, pp. 571-572 (March 12, 1992).				
59	AR	39	Tawfik, A.N. and Vilar, E., "Correlation of Transhorizon Signal Level Strength with Localized Surface Meteorological Parameters," <i>Eighth International Conference on Antennas and Propagation</i> , Electronics Division of the IEE, pp. 335-339 (March 30- April 2, 1993).				

EXAMINER

DATE CONSIDERED

12/10/64

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 <b>INFORMATION DISCLOSURE STATEMENT</b>	ATTY. DOCKET NO. 1744.0140006	APPLICATION NO. 10/086,250
	APPLICANTS Sorrells et al.	
	FILING DATE March 4, 2002	GROUP 2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA40	4,017,798	04/1977	Gordy et al.			
	AB40	4,032,847	08/1977	Unkauf			
	AC40	4,253,067	02/1981	Caples et al.			
	AD40	4,393,395	07/1983	Hacke et al.			
	AE40	4,816,704	03/1989	Flori, Jr.			
	AF40	4,841,265	06/1989	Watanabe et al.			
	AG40	4,943,974	07/1990	Motamedi			
	AH40	5,115,409	05/1992	Stepp			
	AI40	5,353,308	10/1994	Yamamoto			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	40	Tawfik, A.N. and Vilar, E., "Dynamic Structure of a Transhorizon Signal at X-band Over a Sea Path," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 446-450 (April 4-7, 1989).
	AO	40	Tawfik, A.N. and Vilar, E., "Statistics of Duration and Intensity of Path Loss in a Microwave Transhorizon Sea-Path," <i>Electronics Letters</i> , IEE, Vol. 26, No. 7, pp. 474-476 (March 29, 1990).
	AP	40	Tawfik, A.N. and Vilar, E., "X-Band Transhorizon Measurements of CW Transmissions Over the Sea- Part 1: Path Loss, Duration of Events, and Their Modeling," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE Antennas and Propagation Society, Vol. 41, No. 11, pp. 1491-1500 (November 1993).
	AQ	40	Temes, G.C. and Tsvlvis, T., "The Special Section on Switched-Capacitor Circuits," <i>Proceedings of the IEEE</i> , IEEE, Vol. 71, No. 8, pp. 915-916 (August 1983).
SA	AR	40	Thomas, G.B., <i>Calculus and Analytic Geometry</i> , Third Edition, Addison-Wesley Publishing, pp. 119-133 (1960).

EXAMINER 	DATE CONSIDERED 12/16/04
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA41	5,515,014	05/1996	Troutman			
	AB41	5,563,550	10/1996	Toth			
	AC41	5,574,755	11/1996	Persico			
	AD41	5,604,592	02/1997	Kotidis et al.			
	AE41	5,638,396	06/1997	Klimak			
	AF41	5,675,392	10/1997	Nayebi et al.			
	AG41	5,694,096	12/1997	Ushiroku et al.			
	AH41	5,757,870	05/1998	Miya et al.			
SP	AI41	5,768,323	06/1998	Kroeger et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	41	Tomassetti, Q., "An Unusual Microwave Mixer," 16 <sup>th</sup> European Microwave Conference, Microwave Exhibitions and Publishers, pp. 754-759 (September 8-12, 1986).				
	AO	41	Tortoli, P. et al., "Bidirectional Doppler Signal Analysis Based on a Single RF Sampling Channel," IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society, Vol. 41, No. 1, pp. 1-3 (January 1984).				
	AP	41	Tsilvidis, Y. and Antognetti, P. (Ed.), Design of MOS VLSI Circuits for Telecommunications, Prentice-Hall, p. 304 (1985).				
	AQ	41	Tsilvidis, Y., "Principles of Operation and Analysis of Switched-Capacitor Circuits," Proceedings of the IEEE, IEEE, Vol. 71, No. 8, pp. 926-940 (August 1983).				
SP	AR	41	Tsurumi, H. and Maeda, T., "Design Study on a Direct Conversion Receiver Front-End for 280 MHz, 900 MHz, and 2.6 Ghz Band Radio Communication Systems," 41 <sup>st</sup> IEEE Vehicular Technology Conference, IEEE Vehicular Technology Society, pp. 457-462 (May 19-22, 1991).				

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
<i>SB</i>	AA42	5,770,885	06/1998	Ushiroku et al.			
	AB42	5,778,022	07/1998	Walley			
	AC42	5,812,546	09/1998	Zhou et al.			
	AD42	5,818,869	10/1998	Miya et al.			
	AE42	5,844,449	12/1998	Abeno et al.			
	AF42	5,872,446	02/1999	Cranford, Jr. et al.			
	AG42	5,909,447	06/1999	Cox et al.			
	AH42	5,933,467	08/1999	Sehier et al.			
<i>SB</i>	AI42	5,952,895	09/1999	McCune, Jr. et al.			

RECEIVED

DEC 18 2003

Technology Center 2000

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SB</i>	AN	<u>42</u>	Valdmanis, J.A. et al., "Picosecond and Subpicosecond Optoelectronics for Measurements of Future High Speed Electronic Devices," <i>IEDM Technical Digest</i> , IEEE, pp. 587-600 (December 5-7, 1983).
	AO	<u>42</u>	van de Kamp, M.M.J.L., "Asymmetric signal level distribution due to tropospheric scintillation," <i>Electronics Letters</i> , IEE, Vol. 34, No. 11, pp. 1145-1148 (May 28, 1998).
	AP	<u>42</u>	Vasseur, H. and Vanhoenacker, D., "Characterization of tropospheric turbulent layers from radiosonde data," <i>Electronics Letters</i> , IEE, Vol. 34, No. 4, pp. 318-319 (February 19, 1998).
	AQ	<u>42</u>	Verdone, R., "Outage Probability Analysis for Short-Range Communication Systems at 60 Ghz in ATT Urban Environments," <i>IEEE Transactions on Vehicular Technology</i> , IEEE Vehicular Technology Society, Vol. 46, No. 4, pp. 1027-1039 (November 1997).
<i>SB</i>	AR	<u>42</u>	Vierira-Ribeiro, S.A., <i>Single-IF DECT Receiver Architecture using a Quadrature Sub-Sampling Band-Pass Sigma-Delta Modulator</i> , Thesis for Degree of Master's of Engineering, Carleton University, UMI Dissertation Services, pp. 1-180 (April 1995).

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1744.0140006	APPLICATION NO. 10/086,250
	APPLICANTS Sorrells et al.	
	FILING DATE March 4, 2002	GROUP 2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SA	AA43	5,960,033	09/1999	Shibano et al.			
	AB43	6,041,073	03/2000	Davidovici et al.			
	AC43	6,054,889	04/2000	Kobayashi			
	AD43	6,084,922	07/2000	Zhou et al.			
	AE43	6,125,271	09/2000	Rowland et al.			
	AF43	6,147,340	11/2000	Levy			
	AG43	6,147,763	11/2000	Steinlechner			
	AH43	6,150,890	11/2000	Damgaard et al.			
EB	AI43	5,128,682	06/1992	Weinberg et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SA	AN	43	Vilar, E. et al., "A Comprehensive/Selective MM-Wave Satellite Downlink Experiment on Fade Dynamics," <i>Tenth International Conference on Antennas and Propagation</i> , Electronics Division of the IEE, pp. 2.98-2.101 (April 14-17, 1997).
	AO	43	Vilar, E. et al., "A System to Measure LOS Atmospheric Transmittance at 19 Ghz," <i>AGARD Conference Proceedings No. 346: Characteristics of the Lower Atmosphere Influencing Radio Wave Propagation</i> , AGARD, pp. 8-1 - 8-16 (October 4-7, 1983).
	AP	43	Vilar, E. and Smith, H., "A Theoretical and Experimental Study of Angular Scintillations in Earth Space Paths," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE, Vol. AP-34, No. 1, pp. 2-10 (January 1986).
	AQ	43	Vilar, E. et al., "A Wide Band Transhorizon Experiment at 11.6 Ghz," <i>Eighth International Conference on Antennas and Propagation</i> , Electronics Division of the IEE, pp. 441-445 (March 30- April 2, 1993).
SD	AR	43	Vilar, E. and Matthews, P.A., "Amplitude Dependence of Frequency in Oscillators," <i>Electronics Letters</i> , IEE, Vol. 8, No. 20, pp. 509-511 (October 5, 1972).

EXAMINER 	DATE CONSIDERED 12/10/04
--------------	-----------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



**INFORMATION DISCLOSURE STATEMENT**

APPLICATION NO.  
10/086.250

**FILING DATE**  
March 4, 2002

**GROUP  
2686**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SB	AA45	6,121,819	09/2000	Traylor			
	AB45	6,144,236	11/2000	Vica <i>et al.</i>			
	AC45	6,144,846	11/2000	Durec			
	AD45	6,175,728 B1	01/2001	Milama			
	AE45	5,705,949	01/1998	Alelyunas <i>et al.</i>			
	AF45	5,883,548	03/1999	Assard <i>et al.</i>			
	AG45	4,484,143	11/1984	French <i>et al.</i>			
	AH45	5,841,324	11/1998	Williams			
SA	AI45	4,855,894	08/1989	Asahi <i>et al.</i>			

RECEIVED

DEC 18 2003

Technology Center 2600

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

Sp	AN	<u>45</u>	Vilar, E. and Mousley, T.J., "Comment and Reply: Probability Density Function of Amplitude Scintillations," <i>Electronics Letters</i> , IEE, Vol. 21, No. 14, pp. 620-622 (July 4, 1985).
	AO	<u>45</u>	Vilar, E. <i>et al.</i> , "Comparison of Rainfall Rate Duration Distributions for ILE-IFE and Barcelona," <i>Electronics Letters</i> , IEE, Vol. 28, No. 20, pp. 1922-1924 (September 24, 1992).
	AP	<u>45</u>	Vilar, E., "Depolarization and Field Transmittances in Indoor Communications," <i>Electronics Letters</i> , IEE, Vol. 27, No. 9, pp. 732-733 (April 25, 1991).
	AQ	<u>45</u>	Vilar, E. and Larsen, J.R., "Elevation Dependence of Amplitude Scintillations on Low Elevation Earth Space Paths," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 150-154 (April 4-7, 1989).
Sp	AR	<u>45</u>	Vilar, E. <i>et al.</i> , "Experimental System and Measurements of Transhorizon Signal Levels at 11 Ghz," <i>18<sup>th</sup> European Microwave Conference</i> , Microwave Exhibitions and Publishers Ltd., pp. 429-435 (September 12 - 15, 1988).

DATE CONSIDERED 12/10/04

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



DEC 17 2003

FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
EB	AA46	5,319,799	06/1994	Morita			
	AB46	5,801,654	09/1998	Traylor			
	AC46	5,369,404	11/1994	Galton			
	AD46	3,716,730	02/1973	Cerny, Jr.			
	AE46	4,080,573	03/1978	Howell			
	AF46	4,334,324	06/1982	Hoover			
	AG46	4,369,522	01/1983	Cerny, Jr. et al.			
	AH46	5,465,418	11/1995	Zhou et al.			
EB	AI46	5,513,389	04/1996	Reeser et al.			

RECEIVED

DEC 18 2003

Technology Center 2000

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

EB	AN	46	Vilar, E. and Matthews, P.A., "Importance of Amplitude Scintillations in Millimetric Radio Links," <i>Proceedings of the 4<sup>th</sup> European Microwave Conference, Microwave Exhibitions and Publishers</i> , pp. 202-206 (September 10-13, 1974).
	AO	46	Vilar, E. and Haddon, J., "Measurement and Modeling of Scintillation Intensity to Estimate Turbulence Parameters in an Earth-Space Path," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE Antennas and Propagation Society, Vol. AP-32, No. 4, pp. 340-346 (April 1984).
	AP	46	Vilar, E. and Matthews, P.A., "Measurement of Phase Fluctuations on Millimetric Radiowave Propagation," <i>Electronics Letters</i> , IEE, Vol. 7, No. 18, pp. 566-568 (September 9, 1971).
	AQ	46	Vilar, E. and Wan, K.W., "Narrow and Wide Band Estimates of Field Strength for Indoor Communications in the Millimetre Band," <i>Electronics Division Colloquium on Radiocommunications in the Range 30-60 Ghz</i> , IEE, pp. 5/1-5/8 (January 17, 1991).
EB	AR	46	Vilar, E. and Faulkner, N.D., "Phase Noise and Frequency Stability Measurements. Numerical Techniques and Limitations," <i>Electronics Division Colloquium on Low Noise Oscillators and Synthesizer</i> , IEE, 5 pages (January 23, 1986).

EXAMINER

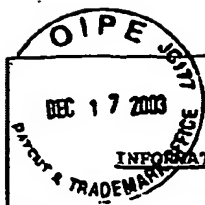
Emm

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086.250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SP	AA48	6,061,555	05/2000	Bultman et al.			
	AB48	6,091,940	07/2000	Sorrells et al.			
	AC48	6,266,518 B1	07/2001	Sorrells et al.			
	AD48	6,353,735 B1	03/2002	Sorrells et al.			
	AE48	6,370,371 B1	04/2002	Sorrells et al.			
	AF48	5,628,055	05/1997	Stein			
	AG48	5,678,220	10/1997	Fournier			
	AH48	5,928,065	07/1999	Wakai et al.			
SP	AI48	3,622,885	11/1971	Oberdorf et al.			

RECEIVED  
DEC 18 2003  
Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	48	Vilar, E. et al., "Wideband Characterization of Scattering Channels," <i>Tenth International Conference on Antennas and Propagation</i> , Electronics Division of the IEE, pp. 2.353-2.358 (April 14-17, 1997).				
	AO	48	Volmer, A., "Complete GPS Receiver Fits on Two Chips," <i>Electronic Design</i> , Penton Publishing, pp. 50, 52, 54 and 56 (July 6, 1998).				
	AP	48	Voltage and Time Resolution in Digitizing Oscilloscopes: Application Note 34B, Hewlett Packard, pp. 1-11 (November 1986).				
	AQ	48	Wan, K.W. et al., "A Novel Approach to the Simultaneous Measurement of Phase and Amplitude Noises in Oscillator," <i>Proceedings of the 19th European Microwave Conference</i> , Microwave Exhibitions and Publishers Ltd., pp. 809-813 (September 4-7, 1989).				
SP	AR	48	Wan, K.W. et al., "Extended Variances and Autoregressive/Moving Average Algorithm for the Measurement and Synthesis of Oscillator Phase Noise," <i>Proceedings Of the 43rd Annual Symposium on Frequency Control</i> , IEEE, pp. 331-335 (1989).				

EXAMINER

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrelle et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
SS	AA49	4,483,017	11/1984	Hampel et al.			
	AB49	6,421,534 B1	07/2002	Cook et al.			
	AC49	6,330,244 B1	12/2001	Swartz et al.			
	AD49	4,384,357	05/1983	deBuda et al.			
	AE49	4,470,145	09/1984	Williams			
	AF49	5,600,680	02/1997	Mishima et al.			
	AG49	5,606,731	02/1997	Pace et al.			
	AH49	5,870,670	02/1999	Ripley et al.			
SN	AI49	6,314,279 B1	11/2001	Mohindra			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SS	AN	49	Wan, K.W. et al., "Wideband Transhorizon Channel Sounder at 11 Ghz," <i>Electronics Division Colloquium on High Bit Rate UHF/SHF Channel Sounders - Technology and Measurement</i> , IEE, pp. 3/1-3/5 (December 3, 1993).
	AO	49	Wang, H., "A 1-V Multigigahertz RF Mixer Core in 0.5 - $\mu$ m CMOS," <i>IEEE Journal of Solid-State Circuits</i> , IEEE Solid-State Circuits Society, Vol. 33, No. 12, pp. 2265-2267 (December 1998).
	AP	49	Watson, A.W.D. et al., "Digital Conversion and Signal Processing for High Performance Communications Receivers," <i>Digital Processing of Signals in Communications</i> , Institution of Electronic and Radio Engineers, pp. 367-373 (April 22nd -26th, 1985).
	AQ	49	Weast, R.C. et al. (Ed.), <i>Handbook of Mathematical Tables</i> , Second Edition, The Chemical Rubber Co., pp. 480-485 (1964).
SN	AR	49	Wiley, R.G., "Approximate FM Demodulation Using Zero Crossings," <i>IEEE Transactions on Communications</i> , IEEE, Vol. COM-29, No. 7, pp. 1061-1065 (July 1981).

EXAMINER

Emm

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE STATEMENT

**APPLICATION NO.**  
**10/086,250**

**FILING DATE**  
**March 4, 2002**

**GROUP  
2686**

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
JY	AA50	5,633,815	05/1997	Young			
	AB50	3,248,084	04/1966	Kryter			
	AC50	3,702,440	11/1972	Moore			
	AD50	3,767,984	10/1973	Shinoda <i>et al.</i>			
	AE50	3,852,530	12/1974	Shen			
	AF50	4,220,977	09/1980	Yamanaka			
	AG50	5,016,242	05/1991	Tang			
	AH50	5,937,013	08/1999	Lam <i>et al.</i>			
	AI50	6,014,551	01/2000	Pesola <i>et al.</i>			

**RECEIVED**

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

50	AN	50	Worthman, W., "Convergence... Again," <i>RF Design</i> , Primedia, p. 102 (March 1999).
	AO	50	Young, I.A. and Hodges, D.A., "MOS Switched-Capacitor Analog Sampled-Data Direct-Form Recursive Filters," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-14, No. 6, pp. 1020-1033 (December 1979).
	AP	50	Translation of Specification and Claims of FR Patent No. 2245130, 3 pages (April 18, 1975- Date of publication of application).
	AQ	50	Fest, Jean-Pierre, "Le Convertisseur A/N Revolutionne Le Recepteur Radio," <i>Electronique</i> , JMJ (Publisher), No. 54, pp. 40-42 (December 1995).
50	AR	50	Translation of DE Patent No. 35 41 031 A1, 22 pages (May 22, 1988- Date of publication of application).

**EXAMINER**

DATE CONSIDERED

12/6/04

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

**INFORMATION DISCLOSURE STATEMENT**

APPLICATION NO.  
10/086,250

**FILING DATE**  
**March 4, 2002**

**GROUP  
2686**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
EZ	AA51	6,073,001	06/2000	Sokoler			
	AB51	6,085,073	07/2000	Paterno et al.			
	AC51	6,400,963 B1	06/2002	Glöckler et al.			
	AD51	6,230,000 B1	05/2001	Taylor			
	AE51	5,483,695	01/1996	Pardon			
	AF51	6,542,722 B1	04/2003	Sorrells et al.			
	AG51	6,560,301 B1	05/2003	Cook et al.			
	AH51	6,098,046	08/2000	Cooper et al.			
	AI51	5,564,097	10/1996	Swanke			

RECEIVED  
 DEC 18 2003  
 Technology Center 2000

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

50	AN	<u>51</u>	Translation of EP Patent No. 0 732 803 A1, 9 pages (September 18, 1996- Date of publication of application).
	AO	<u>51</u>	Fest, Jean-Pierre, "The A/D Converter Revolutionizes the Radio Receiver," <i>Electronique</i> , JMJ (Publisher), No. 54, 3 pages (December 1995). (Translation of Doc. AQ50).
	AP	<u>51</u>	Translation of German Patent No. DE 197 35 798 C1, 8 pages (July 16, 1998- Date of publication of application).
	AQ	<u>51</u>	Miki, S. and Nagahama, R., <i>Modulation System II</i> , Common Edition 7, Kyoritsu Publishing Co., Ltd., pp. 146-154 (April 30, 1956).
51	AR	<u>51</u>	Miki, S. and Nagahama, R., <i>Modulation System II</i> , Common Edition 7, Kyoritsu Publishing Co., Ltd., pp. 146-149 (April 30, 1956). (Partial Translation of Doc. AQ51).

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
80	AA52	5,898,912	04/1999	Heck et al.			
	AB52	4,660,164	04/1987	Leibowitz			
	AC52	6,580,802 B1	06/2003	Sorrells et al.			
	AD52	4,857,928	08/1989	Gailus et al.			
	AE52	5,389,839	02/1995	Heck			
	AF52	5,471,665	11/1995	Pace et al.			
	AG52	6,327,313 B1	12/2001	Traylor et al.			
	AH52	5,751,154	05/1998	Tsugai			
82	AI52	5,793,817	08/1998	Wilson			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

80	AN	52	Rabiner, L.R. and Gold, B., <i>Theory And Application Of Digital Signal Processing</i> . Prentice-Hall, Inc., pp. v-xii and 40-46 (1975).				
	AO	52	English-language Abstract of Japanese Patent Publication No. 08-032556, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (February 2, 1996 - Date of publication of application).				
	AP	52	English-language Abstract of Japanese Patent Publication No. 08-139524, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (May 31, 1996 - Date of publication of application).				
	AQ	52	English-language Abstract of Japanese Patent Publication No. 59-144249, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (August 18, 1984 - Date of publication of application).				
82	AR	52	English-language Abstract of Japanese Patent Publication No. 63-054002, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (March 8, 1988 - Date of publication of application).				

EXAMINER

[Signature]

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrelle et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
Sp	AA53	6,225,848 B1	05/2001	Tilley et al.			
	AB53	6,313,685 B1	11/2001	Rabi			
	AC53	3,614,627	10/1971	Runyan et al.			
	AD53	3,940,697	02/1976	Morgan			
	AE53	4,016,366	04/1977	Kurata			
	AF53	4,045,740	08/1977	Baker			
	AG53	4,115,737	09/1978	Hongu et al.			
	AH53	5,710,992	01/1998	Sawada et al.			
Sp	AI53	5,790,587	08/1998	Smith et al.			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Sp	AN	53	English-language Abstract of Japanese Patent Publication No. 06-237276, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (August 23, 1994 - Date of publication of application).				
	AO	53	English-language Abstract of Japanese Patent Publication No. 08-023359, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (January 23, 1996 - Date of publication of application).				
	AP	53	Translation of Japanese Patent Publication No. 47-2314, 7 pages (February 4, 1972- Date of publication of application).				
	AQ	53	Partial Translation of Japanese Patent Publication No. 58-7903, 3 pages (January 17, 1983- Date of publication of application).				
Sp	AR	53	English-language Abstract of Japanese Patent Publication No. 58-133004, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (August 8, 1993 - Date of publication of application).				

EXAMINER

Sp

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

DEC 17 2003

FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
SP	AA54	4,740,675	04/1988	Brosnan et al.			
	AB54	5,483,600	01/1998	Wentbach			
	AC54	6,011,435	01/2000	Takeyabu et al.			
	AD54	6,321,073 B1	11/2001	Luz et al.			
	AE54	6,026,288	02/2000	Long			
	AF54	6,178,319 B1	01/2001	Kashima			
	AG54	6,634,555 B1	10/2003	Sorrells et al.			
	AH54	3,736,513	05/1973	Wilson			
SP	AI54	4,488,119	12/1984	Marshall			

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SP	AN	54	English-language Abstract of Japanese Patent Publication No. 60-058705, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (April 4, 1985 - Date of publication of application).				
	AO	54	English-language Abstract of Japanese Patent Publication No. 04-123614, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (April 23, 1992 - Date of publication of application).				
	AP	54	English-language Abstract of Japanese Patent Publication No. 04-127601, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (April 28, 1992 - Date of publication of application).				
	AQ	54	English-language Abstract of Japanese Patent Publication No. 05-175730, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (July 13, 1993 - Date of publication of application).				
SP	AR	54	English-language Abstract of Japanese Patent Publication No. 05-175734, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (July 13, 1993 - Date of publication of application).				

EXAMINER

SP/2/2

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
95	AA55	4,633,510	12/1986	Suzuki et al.			
	AB55	5,369,789	11/1994	Kosugi et al.			
	AC55	5,416,449	05/1995	Joshi			
	AD55	5,438,329	08/1995	Gastouniottis et al.			
	AE55	6,611,569 B1	08/2003	Schier et al.			
50	AF55	6,647,250 B1	11/2003	Bullman et al.			
	AG						
	AH						
	AI						

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

95	AN	55	English-language Abstract of Japanese Patent Publication No. 07-154344, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (June 16, 1995 - Date of publication of application).				
	AO	55	English-language Abstract of Japanese Patent Publication No. 07-307620, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (November 21, 1995 - Date of publication of application).				
	AP	55	Oppenheim, A.V. and Schafer, R.W., <i>Digital Signal Processing</i> , Prentice-Hall, pp. vii-x, 6-35, 45-78, 87-121 and 136-165 (1975).				
	AQ	55	English-language Abstract of Japanese Patent Publication No. 55-066057, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (May 19, 1980 - Date of publication of application).				
50	AR	55	English-language Abstract of Japanese Patent Publication No. 63-065587, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (March 24, 1988 - Date of publication of application).				


EXAMINER

Emm

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

	FORM PTO-1449		ATTY. DOCKET NO. 1744.0140006	APPLICATION NO. 10/086,250
	INFORMATION DISCLOSURE STATEMENT		APPLICANTS Sorrells et al.	
			FILING DATE March 4, 2002	GROUP 2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

RECEIVED

DEC 18 2003

Technology Center 2000

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Cg	AN	56	English-language Abstract of Japanese Patent Publication No. 63-153691, from <a href="http://www1.ipdl.jpo.go.jp">http://www1.ipdl.jpo.go.jp</a> , 2 Pages (June 27, 1988 - Date of publication of application).
	AO	56	Translation of Japanese Patent Publication No. 60-130203, 3 pages (July 11, 1985- Date of publication of application).
	AP	56	Razavi, B., "A 900-MHz/1.8-GHz CMOS Transmitter for Dual-Band Applications," <i>Symposium on VLSI Circuits Digest of Technical Papers</i> , IEEE, pp. 128-131 (1998).
	AQ	56	Ritter, G.M., "SDA, A New Solution for Transceivers," <i>16th European Microwave Conference</i> , Microwave Exhibitions and Publishers, pp. 729-733 (September 8, 1986).
Ed	AR	56	DIALOG File 351 (Derwent WPI) English Language Patent Abstract for FR 2 669 787, 1 page (May 29, 1992- Date of publication of application).

EXAMINER <i>Emm</i>	DATE CONSIDERED <i>12/11/04</i>
---------------------	---------------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

RECEIVED

DEC 18 2003

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Sp	AN	57	Akos, D.M. et al., "Direct Bandpass Sampling of Multiple Distinct RF Signals," <i>IEEE Transactions on Communications</i> , IEEE, Vol. 47, No. 7, pp. 983-988 (July 1999).				
	AO	57	Patel, M. et al., "Bandpass Sampling for Software Radio Receivers, and the Effect of Oversampling on Aperture Jitter," <i>VTC 2002, IEEE</i> , pp. 1901-1905 (2002).				
	AP	57	English-language Abstract of Japanese Patent Publication No. 61-030821, from <a href="http://www1.lpd.jpo.go.jp">http://www1.lpd.jpo.go.jp</a> , 2 Pages (February 13, 1988- Date of publication of application).				
	AQ	57	English-language Abstract of Japanese Patent Publication No. 05-327356, from <a href="http://www1.lpd.jpo.go.jp">http://www1.lpd.jpo.go.jp</a> , 2 Pages (December 10, 1993 - Date of publication of application).				
SM	AR	57	Tayloe, D., "A Low-noise, High-performance Zero IF Quadrature Detector/Preamplifier," <i>RF Design</i> , Primedia Business Magazines & Media, Inc., pp. 58, 60, 62 and 69 (March 2003).				

EXAMINER

[Signature]

DATE CONSIDERED

12/10/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

**INFORMATION DISCLOSURE STATEMENT**

**APPLICATION NO.**  
**10/086,250**

**FILING DATE**  
**March 4, 2002**

**GROUP  
2686**

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

**RECEIVED**

DEC 18 2003

Technology Center 2600

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
EN	AN	58	Dines, J.A.B., "Smart Pixel Optoelectronic Receiver Based on a Charge Sensitive Amplifier Design," <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , IEEE, Vol. 2, No. 1, pp. 117-120 (April 1996).
	AO	58	Simoni, A. et al., "A Digital Camera for Machine Vision," <i>20th International Conference on Industrial Electronics, Control and Instrumentation</i> , IEEE, pp. 879-883 (September 1994).
	AP	58	Stewart, R.W. and Pfann, E., "Oversampling and sigma-delta strategies for data conversion," <i>Electronics &amp; Communication Engineering Journal</i> , IEEE, pp. 37-47 (February 1998).
	AQ	58	Rudell, J.C. et al., "A 1.9-GHz Wide-Band IF Double Conversion CMOS Receiver for Cordless Telephone Applications," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. 32, No. 12, pp. 2071-2088 (December 1997).
EN	AR	58	English-language Abstract of Japanese Patent Publication No. 09-036664, from <a href="http://www1.ipdl.jp.o.go.jp">http://www1.ipdl.jp.o.go.jp</a> , 2 Pages (February 7, 1997 - Date of publication of application).

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.